[0042] Similarly, the second load **32** might be a set of electric lights, and it is understood that many types of electrical lights, including fluorescent, incandescent, and LED, by way of example, are operable at a plurality of different operational levels. As such, the table data **84** might include a curve or might include a table of discrete values that correlate a reduction in light intensity with a corresponding reduction in the power that is consumed by the lights. The light intensity could be adjusted by a control mechanism that is connected with the second load **32**.

[0043] As was mentioned elsewhere herein, the table data **84** might include a curve and/or a set of discrete values that correlate the operational speed of the third load **40**, which is an exemplary fan motor, with a corresponding change in power consumption. The table data **84** might additionally include one or more data values that represent switching the fourth load **44**, which is an exemplary compressor motor of an electric heat pump, between an ON condition and an OFF condition. In this regard, it is noted that the HVAC system **36** can provide appropriate comfort to the occupants of a household or other facility for a period of time if the compressor motor **44** is de-energized, so long as the fan motor **40** remains operational. It thus is possible for a system such as the HVAC system **36** to have a plurality of loads but to, at least initially, alter an operational parameter of fewer than all of the loads that make up the system.

[0044] By way of further example, the sixth load **52** might be a pump for a filtration system on a swimming pool or may be a charger for an electric vehicle or may be any of a wide variety of other types of loads. The table data **84** would include wattage values for switching the loads between an ON condition and an OFF condition, depending upon the nature of the load, or would contain curves and/or discrete table values for changes in the operational levels of the various loads, such as operational velocity (such as in the example of a motor speed), operational intensity (such as in the example of an illumination level), and the like without limitation.

[0045] The operational parameters can be adjusted in any of a wide variety of fashions to meet the needs of the local electrical network **8** at any given time. For example, if the power source **20** is generating 1.0 kilowatts more power than can be supplied to the power grid **12** at any given instant due to the applicable ramp rate, it might be desirable to switch the first load **28** from an OFF condition to an ON condition if doing so would consume at least the 1.0 excess kilowatts. Since the applicable ramp rate that must be met is a varying, i.e., it is a ramp rate, it may be necessary to energize the first load **28** for, by way of example, only one or two minutes, after which time the first load **28** could be switched from the ON condition back to the OFF condition so long as the applicable ramp rate is not exceeded.

[0046] The ramp rates typically may include both increasing ramp rates and decreasing ramp rates. In situation where the power that is being generated by the power source **20** is decreasing rapidly in a fashion that would cause the power that is being supplied to the power grid **12** to exceed a decreasing ramp rate, it might be desirable to switch the first load **28** from an ON condition to an OFF condition. On the other hand, if the first load **28** is already in its OFF condition, it may be necessary to instead switch the fourth load **44** from its ON condition to its OFF condition if it is currently in its ON condition.

[0047] In this regard, any manner of logic can be employed to choose which of the loads of the load apparatus **24** should have their operational parameters adjusted. For example, if no individual load can have its operational parameter adjusted in a fashion that will precisely meet the applicable ramp rate, it may be desirable to switch two of the loads to increase or decrease their consumption of electricity, or to cause one of the two loads to increase its consumption of power while the other of the two loads decreases its consumption of power. Likewise, it may be desirable to rotate the loads whose operational parameter is adjusted. For instance, if the first load **28** is an electric water heater, the routines **80** might decide that it is inappropriate to constantly switch such a load to an ON condition because the frequency of energizing the hot water tank is causing its temperature level to far exceed the set water temperature. In such a case, it might be desirable to adjust the operational parameter of another load instead. Furthermore, and depending upon the length of the ramp time, it may be desirable to switch one load from an OFF condition to an ON condition while simultaneously switching another load from an ON condition to an OFF condition. Still alternatively, it may be desirable to control the HVAC system **36** by increasing or decreasing its set temperature by a certain number of degrees rather than discretely energizing or de-energizing its compressor motor **44** or by reducing the speed of its fan motor **40**. Other variations will be apparent.

[0048] It thus can be seen that any of a wide variety of electrical loads that are connected with the local electrical network **8** can have an operational parameter adjusted in order to increase or decrease the power that is being supplied from the local electrical network **8** to the power grid **12**. Such adjustment is performed in a fashion to meet the applicable ramp rate in circumstances where it is determined that power to the power grid **12** and voltage of the power grid **12** are correlated. By employing loads such as appliances and the like that are already existent in the household and that are electrically connected with the local electrical network **8**, it is possible to avoid the excessive cost of batteries and other storage devices that are intended to temporarily store electrical power and to return such power to the local electrical network **8**. Such batteries are known to be inefficient in storing electrical power, and the charge controllers that control the power that is being supplied to such batteries to charge them are likewise notoriously inefficient. The disclosed and claimed concept advantageously overcomes these shortcomings that are known to exist with such battery storage systems.

[0049] FIG. **4** depicts a flowchart that sets forth certain aspects of an improved method in accordance with the disclosed and claimed concept. Processing begins, as at **102**, where the voltage of the power grid **12** and the wattage of the power that is being supplied from the local electrical network **8** to the power grid **12** are both measured. It is then determined, as at **106**, whether the power and voltage are correlated, such as by employing the cross-correlation functions set forth above. If no correlation is identified, or if any such correlation is of insufficient magnitude to meet the applicable threshold, processing returns, as at **102**.

[0050] However, if such a correlation is identified at **106**, processing continues, as at **114**, where the routines **80** determine whether an applicable ramp rate is being exceeded. If it is determined at **114** that the ramp rate is not being exceeded, processing returns, as at **102**.